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## **The management of hot flushes for men treated with androgen deprivation therapy for prostate cancer: a survey of UK practice**

William Kinnaird, University College London Hospitals, London, United Kingdom  
Ami Mehta, University College London Hospitals, London, United Kingdom  
Carina Guo, University College London Hospitals, London, United Kingdom  
Heather Payne, University College London Hospitals, London, United Kingdom  
Valerie Jenkins, Sussex Health Outcomes, Research & Education in Cancer, University of Sussex,  
Brighton, United Kingdom  
Susan Catt, Sussex Health Outcomes, Research & Education in Cancer, University of Sussex,  
Brighton,  
United Kingdom

### **Corresponding author:**

William Kinnaird  
University College London Hospitals, London, United Kingdom  
[william.kinnaird@nhs.net](mailto:william.kinnaird@nhs.net)  
Radiotherapy Department, Basement, University College London Hospitals, 235 Euston Road, London NW1 2BU

### **Declarations of interest:**

William Kinnaird – None  
Ami Mehta – None  
Carina Guo – None  
Heather Payne – Attended and received honoraria for advisory boards, travel expenses to medical meetings and served as a consultant for AstraZeneca, Astellas, Janssen, Sanofi Aventis, Ferring Bayer and Novartis.  
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## Background

Androgen deprivation therapy (ADT) is one of the main treatments for prostate cancer. Short-term ADT of between 6 months and 3 years is often used in combination with radiotherapy to treat localised and locally advanced prostate cancer. Permanent or intermittent ADT is used to treat metastatic disease. Hot flushes affect 44-80% of men undergoing ADT for prostate cancer, with around 27% saying they are the most distressing side effect.<sup>1</sup> A recent UK survey found 30.7% of men treated with ADT reported moderate or major problems with hot flushes.<sup>2</sup> Low testosterone levels are thought to cause dysfunction in thermoregulation in the hypothalamus, resulting in peripheral vasodilatation.<sup>3</sup> Symptoms include a feeling of warmth, flushing of the skin, perspiration, chills, anxiety and palpitations. A variety of treatments have been evaluated and there is evidence of efficacy for several of them, however they all have additional side effect profiles. The National Institute for Health and Care Excellence (NICE) and European Association of Urology recommend offering medroxyprogesterone or cyproterone acetate.<sup>4-5</sup> NICE has said there is currently a lack of evidence to support the use of complementary therapies. Addressing the side-effects of cancer treatment is one of the top ten *Living with and Beyond Cancer* research priorities established by the National Cancer Research Institute. However, there is little evidence on the standard of care that UK clinicians offer to men suffering with hot flushes.

## Aim

To investigate, we designed a survey seeking clinicians' views on current UK practice in the management of hot flushes and whether they would value the opportunity to refer patients for acupuncture. The survey included seven questions – six with multiple response options and one with free text. Surveys were emailed in November/December 2019 to members of the British Uro-oncology Group, whose membership is largely made up of clinical and medical oncologists specialising in urology.

## Findings

A total of 64 out of 95 surveys were returned, representing a response rate of 67%. Around 85% of clinicians reported that at least half their patients experienced hot flushes while on ADT. The most common ameliorative interventions recommended were lifestyle changes (77%), cyproterone acetate (72%), acupuncture (61%), herbal medicines (59%) and medroxyprogesterone (56%) (Figure 1). Satisfaction with all therapies was <50% with the proportion saying they were satisfied/very satisfied highest with cyproterone acetate (49%), medroxyprogesterone (42%) and acupuncture (37%) (Figure 1). More than 90% of clinicians said they would refer patients for acupuncture if it were available on the National Health Service (NHS). This view was reflected when clinicians were asked for comments on acupuncture and the management of hot flushes more generally. There were no negative responses to the use of acupuncture, and many commented on anecdotal evidence of efficacy: "Most found it very helpful"; "There is benefit... but doesn't work for all"; "Helps about a third of gentlemen". Many called for more research to inform their practice: "Robust trials needed to ensure appropriate use"; "Need to see more evidence"; "I would be keen to participate in a trial".

## Conclusion

The responses to this survey suggest that the management of hot flushes varies greatly, with relatively low levels of satisfaction with any of the current treatment options. Clinicians were open-minded to complementary treatments and a majority said they would like to refer patients for acupuncture and would welcome more research on efficacy for this therapy to determine if it could be recommended.

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